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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/737,368	12/15/2000	Lorin Evan Ullmann	AUS920000829-US1	2405

7590 09/22/2004
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EXAMINER

PATEL, HARESH N

ART UNIT PAPER NUMBER

2154

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/737,368	Applicant(s) ULLMANN ET AL.	
	Examiner Haresh Patel	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
4a) Of the above claim(s) 9, 10, 23, 24 and 29 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-8, 11-22, 25-28 and 30 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 15 December 0200 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2 / 1/16/2001</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. Claims 1-30 are presented for examination. Claims 9, 10, 23, 24, 29 are withdrawn.

Claims 1-8, 11-22, 25-28 and 30 are examined.

Election/Restrictions

2. Claims 9, 10, 23, 24, and 29 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group I invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 7/28/2004. Hence, examiner requests applicant to cancel the claims 9, 10, 23, 24, and 29.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The present title is not sufficient for proper classification of the claimed subject matter.

4. The specification is objected to because of the following reasons:

a. Line 10, page 7, of the specification is missing application number information.

Appropriate correction is requested.

Drawings

5. New corrected drawings are required in this application because hand drawn figures are not allowed. Also, new figures are required to demonstrate the claimed limitations. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S.

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Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Information Disclosure Statement

6. An initialed and dated copy of Applicant's IDS form 1449, Paper No. 2, dated 1/16/2001, is attached to the instant Office action.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 28 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claim 28 recites the limitation "A program storage device readable by machine, ... , said method comprising the steps of:". There is insufficient antecedent basis for this limitation in the claim. Also, it is not clear whether the claim is for a storage device or a method.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-6, 11, 12, 15-20, 25, 26, 28, 30, are rejected under 35 U.S.C. 102(e) as being anticipated by Li et al. 6,738,819 (Hereinafter Li).

11. As per claims 1, 11, 15, 17, 25, 28, and 30, Li teaches an apparatus, computer readable medium, a method for identifying slow links (e.g., weakest link, col., 5, line 11, QoS manager identifying links based on bandwidth, col., 7, lines 37 – 40, col., 8, lines 15, 27, figure 8) and dynamically adjusting application usage of links (e.g., dynamic bandwidth adjustment, abstract) in a distributed network comprising a plurality of computers (e.g., figure 1) having a plurality of endpoints (e.g., block 18 and 19, customers, figure 1), said endpoints being connected by a plurality of links (e.g., col., 4, lines 8 – 24) comprising the steps of:

- defining an original link speed factor for each of said plurality of links (e.g., Quality of service needed bandwidth parameters requirement, col., 7, lines, 29 – 49),

- performing at least one runtime measurement of at least one runtime link speed indicator for each of said plurality of links (e.g., col., 6, lines 58 – 67);

- calculating a runtime link speed factor based on said runtime measurement of at least one runtime link speed indicator for each of said plurality of links (e.g., col., 7, lines 1 – 19) and

- comparing the original link speed factor to the runtime link speed factor for each of said plurality of links (e.g., col., 7, lines 1 – 19),

- detecting at least one slow link in said distributed network (e.g., col., 6, lines 39 – 54);

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for each detected slow link, determining what specific applications requires access to said detected slow link (e.g., QoS applications needed bandwidth of the links, col., 5, lines 13 – 33); and

adjusting application usage of said detected slow link by said each of said specific applications (e.g., col., 5, lines 52 – col., 6, line 9).

12. As per claims 2, 18, Li teaches the following:

designating as a slow link any link for which the runtime link speed factor satisfies a desired relationship to the original link speed factor (e.g., col., 2, lines 40 – 54).

13. As per claims 3 and 19, Li teaches the following:

notifying at least one of said computers about at least one of the designated slow links (e.g., col., 7, lines 29 – 40).

14. As per claim 4, Li teaches the following:

a plurality of applications are running in said network (e.g., Quality of service needed applications, col., 2, lines 26 – 54) and further comprising notifying at least one of said applications about at least one of the designated slow links (e.g., col., 7, lines 29 – 40).

15. As per claims 5, 16, Li teaches the following:

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said at least one of said applications altering its usage of said at least one of the designated slow links (e.g., use of needed bandwidth by the application, use of QoS manager, col., 2, lines 40 – 54).

16. As per claims 6 and 20, Li teaches the following:

a plurality of applications are running in said network (e.g., QoS needed applications, col., 2, lines 26 – 54) and further comprising automatically altering application usage of the designated slow links (e.g., dynamic support of QoS manager, col., 2, lines 40 – 54).

17. As per claims 12 and 26, Li teaches the following:

said adjusting application usage comprises invoking preprogrammed application responses (e.g., col., 7, lines 20 – 40).

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 7, 8, 13, 14, 21, 22 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li in view of Ganz et. al, 6,049,549 (Hereinafter Ganz).

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20. As per claims 7, 8, 13, 14, 21, 22 and 27, Li teaches the claimed limitations as rejected under claims 2, 11, 18, 25. However, Li does not specifically mention about an administrator identifying designated slow links and altering application usage of the designated slow links.

Ganz teaches an administrator identifying designated slow links and altering application usage of the designated slow links (e.g., col., 5, line 58 – col., 6, line 11).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Li with the teachings of Ganz in order to facilitate accessing, monitoring and modifying link related parameters by an administrator using a graphical user interface. The motivation would be obvious because it is well in the art to use a network administration station (NAS) to access, monitor and modify link related parameters. The links that are weak can be identified and monitored and when necessary an application that needs necessary bandwidth can be assigned to a larger bandwidth link, as suggested by Ganz.

21. Claims 1-8, 11-22, 25-28 and 30, are rejected under 35 U.S.C. 102(e) as being anticipated by Chirashnya et al. 6,601,195 (Hereinafter Chirashnya).

22. As per claims 1, 11, 15, 17, 25, 28, and 30, Chirashnya teaches an apparatus, computer readable medium, a method for identifying slow links (e.g., low data rate link, col., 3, lines 5-21) and dynamically adjusting application usage of links (e.g., col., 19, lines 18 - 28) having a plurality of endpoints (e.g., figure 1), said endpoints being connected by a plurality of links (figure 1) comprising the steps of:

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defining an original link speed factor for each of said plurality of links (e.g., administrator specified rate parameters, figure 9, col., 16, lines 32 - 58),

performing at least one runtime measurement of at least one runtime link speed indicator for each of said plurality of links (e.g., col., 3, lines 33 - 50);

calculating a runtime link speed factor based on said runtime measurement of at least one runtime link speed indicator for each of said plurality of links (e.g., col., 3, lines 33 - 50) and

comparing the original link speed factor to the runtime link speed factor for each of said plurality of links (e.g., col., 3, lines 33 - 50),

detecting at least one slow link in said distributed network (e.g., col., 3, lines 5- 21);

for each detected slow link, determining what specific applications requires access to said detected slow link (e.g., col., 3, lines 5 - 32); and

adjusting application usage of said detected slow link by said each of said specific applications (e.g., col., 4, lines 12 – col., 6, line 24).

23. As per claims 2, 18, Chirashnya teaches the following:

designating as a slow link any link for which the runtime link speed factor satisfies a desired relationship to the original link speed factor (e.g., col., 3, lines 44 - 64).

24. As per claims 3 and 19, Chirashnya teaches the following:

notifying at least one of said computers about at least one of the designated slow links (e.g., col., 4, lines 23 – 35).

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25. As per claim 4, Chirashnya teaches the following:

a plurality of applications are running in said network (e.g., col., 12, lines 42 - 49) and further comprising notifying at least one of said applications about at least one of the designated slow links (e.g., col., 16, line 54 – col., 17, line 9).

26. As per claims 5, 16, Chirashnya teaches the following:

said at least one of said applications altering its usage of said at least one of the designated slow links (e.g., col., 15, line 60 – col., 16, line 8).

27. As per claims 6 and 20, Chirashnya teaches the following:

a plurality of applications are running in said network (e.g., col., 12, lines 42 - 49) and further comprising automatically altering application usage of the designated slow links (e.g., col., 15, line 60 – col., 16, line 8).

28. As per claims 12 and 26, Chirashnya teaches the following:

said adjusting application usage comprises invoking preprogrammed application responses (e.g., col., 15, line 60 – col., 16, line 8).

29. As per claims 7, 8, 13, 14, 21, 22 and 27, Chirashnya teaches the following

an administrator identifying designated slow links and altering application usage of the designated slow links (e.g., col., 16, lines 31 – 64).

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haresh Patel whose telephone number is 703-605-5234. The examiner can normally be reached on Monday, Tuesday, Thursday and Friday from 10:00 am to 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 703-305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Haresh Patel

September 14, 2004


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